

Abstract

In a process of making a magnetoresistive memory device, a mask layout is produced by use of any suitable design tool. The mask layout is laid out in grids having a central grid forming a central section and
5 grids forming bit end sections, and the grids of the bit end sections are rectangles. A mask is made by use of the mask layout, and the mask has stepped bit ends. The mask is used to make a magnetic storage layer having tapered bit ends, to make a magnetic sense layer having
10 tapered bit ends, and to make a non-magnetic layer having tapered bit ends. The non-magnetic layer is between the magnetic sense layer and the magnetic storage layer.